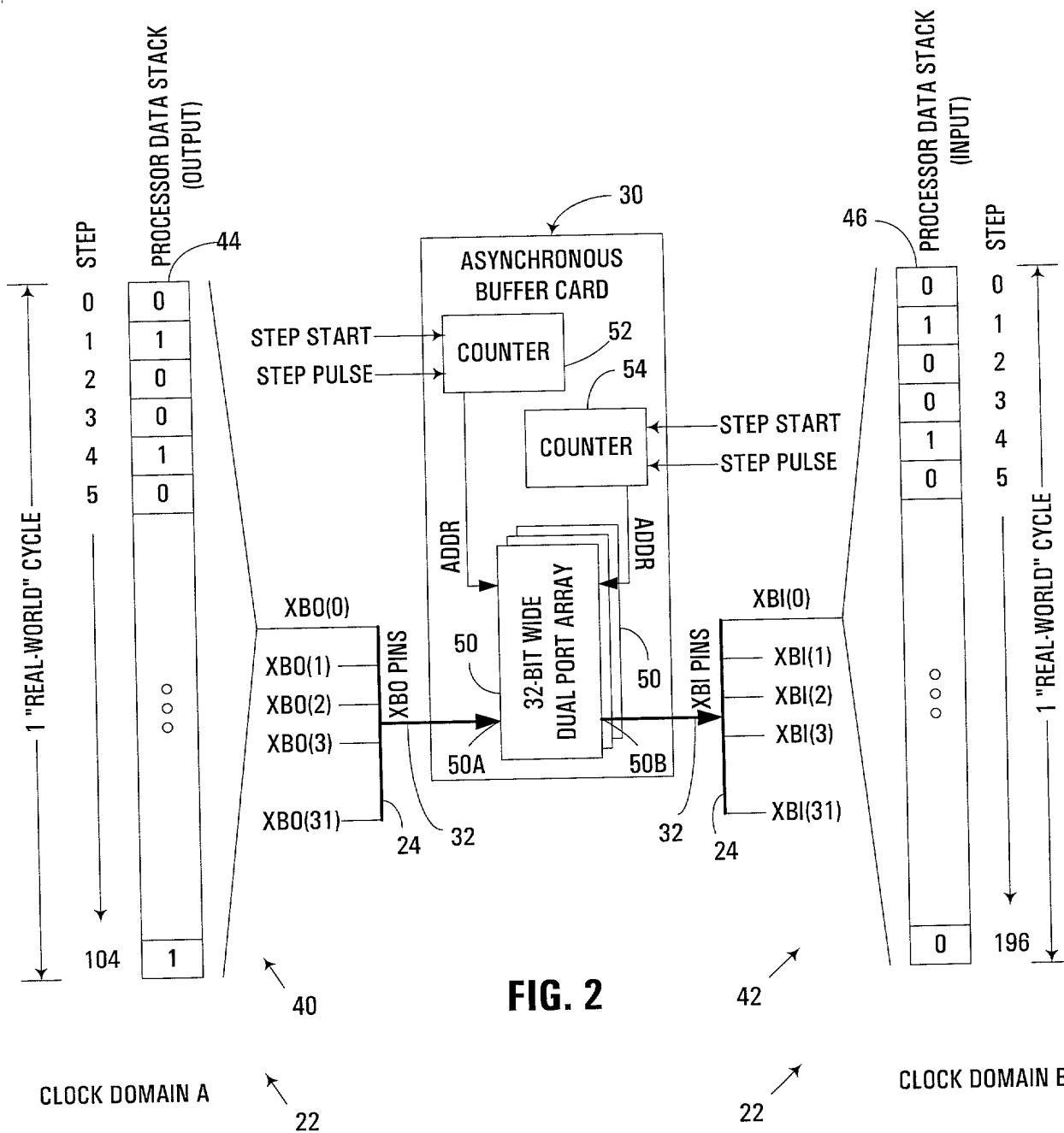


FIG. 1



CLOCK DOMAIN A					ASYNCHRONOUS BUFFER CARD									CLOCK DOMAIN B				
STEP	PULSE	STEP #	VALUE		ARRAY INPUT	CNTR A	[0]	[1]	[2]	[3]	[4]	[5]	CNTR B	ARRAY OUTPUT	STEP PULSE	STEP #	VALUE READ	
0					X		X	X	X	X	X	X		X				
1	ACTIVE	0	X		X	RESET 0	X	X	X	X	X	X	X	X				
2	ACTIVE	1	BUSB(9)=1		1		1	1	1	1	1	1		X				
3	ACTIVE	2	ENABLE=0		0		2	1	0	0	0	0	RESET 0	X	ACTIVE	0	X	
4	ACTIVE	3	FLUSH=0		0		3	1	0	0	0	0	1	1	ACTIVE	1	BUSB(9)=1	
5	ACTIVE	4	X		X		4	1	0	0	0	0	2	0	ACTIVE	2	ENABLE=0	
6	ACTIVE	5	X		X		5	1	0	0	0	0	3	0	ACTIVE	3	FLUSH=0	
7					X		5	1	0	0	0	0	3	0				
8					X		5	1	0	0	0	0	3	0				
9					X		5	1	0	0	0	0	3	0				
10					X		5	1	0	0	0	0	RESET 0	X	ACTIVE	0	X	
11					X		5	1	0	0	0	0	1	1	ACTIVE	1	BUSB(9)=1	
12					X		5	1	0	0	0	0	2	0	ACTIVE	2	ENABLE=0	
13					X		5	1	0	0	0	0	3	0	ACTIVE	3	FLUSH=0	
14					X		5	1	0	0	0	0	3	0				
15	ACTIVE	0	X		X	RESET 0	X	1	0	0	0	0	3	0				
16	ACTIVE	1	BUSB(9)=0		0		1	0	0	0	0	0	RESET 0	X	ACTIVE	0	X	
17	ACTIVE	2	ENABLE=1		1		2	0	1	0	0	0	1	0	ACTIVE	1	BUSB(9)=0	
18	ACTIVE	3	FLUSH=0		0		3	0	1	0	0	0	2	1	ACTIVE	2	ENABLE=1	
19	ACTIVE	4	X		X		4	0	1	0	0	0	3	0	ACTIVE	3	FLUSH=0	
20	ACTIVE	5	X		X		5	0	1	0	0	0	3	0				
21					X		5	0	1	0	0	0	3	0				
22	ACTIVE	0	X		X	RESET 0	X	0	1	0	0	0	3	0				
23	ACTIVE	1	BUSB(9)=0		0		1	0	1	0	0	0	3	0	ACTIVE	0	X	
24	ACTIVE	2	ENABLE=1		1		2	0	1	0	0	0	3	0	ACTIVE	1	BUSB(9)=0	
25	ACTIVE	3	FLUSH=1		1		3	0	1	0	0	0	3	0	ACTIVE	2	ENABLE=1	
26	ACTIVE	4	X		X		4	0	1	1	0	0	3	0	ACTIVE	3	FLUSH=0	
27	ACTIVE	5	X		X		5	0	1	1	0	0	3	0				
28					X		5	0	1	1	0	0	3	0				
29	ACTIVE	0	X		X	RESET 0	X	0	1	1	0	0	RESET 0	X	ACTIVE	0	X	
30	ACTIVE	1	BUSB(9)=1		1		1	1	1	1	0	0	1	X (Unstable)	ACTIVE	1	BUSB(9)=X	
31	ACTIVE	2	ENABLE=0		0		2	1	0	1	0	0	2	X (Unstable)	ACTIVE	2	ENABLE=X	
32	ACTIVE	3	FLUSH=0		0		3	1	0	0	0	0	3	X (Unstable)	ACTIVE	3	FLUSH=X	
33	ACTIVE	4	X		X		4	1	0	0	0	0	3	X				
34	ACTIVE	5	X		X		5	1	0	0	0	0	RESET 0	X	ACTIVE	0	X	
35					X		5	1	0	0	0	0	1	0	ACTIVE	1	BUSB(9)=1	
36					X		5	1	0	0	0	0	2	1	ACTIVE	2	ENABLE=0	
37					X		5	1	0	0	0	0	3	1	ACTIVE	3	FLUSH=0	
38					X		5	1	0	0	0	0	3	1				

FIG. 3

FIG. 3